

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER PROTECTION BUREAU  
Metcalf Building, Helena, Montana 59620  
(406) 444-3080**

**ENVIRONMENTAL ASSESSMENT (EA)**

**Division/Bureau:** Permitting & Compliance Division, MPDES Permits;

**Project or Application:** City of Bozeman ,Wastewater Treatment Plant ,Permit Renewal MT-0022608

**Description of Project:** This application is for the reissuance of a wastewater discharge permit issued to the City of Bozeman. Discharge is to the East Gallatin River which is classified as “B-2” by the Montana Surface Water Quality Standards. The East Gallatin River in the area of discharge is listed as impaired on the Montana 1996 303(d) list and is given low priority for TMDL development.

**Benefits and Purpose of Proposal:**

Adequate treatment of domestic and industrial wastewater before discharging to surface water.

**Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:**

None

**Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:**

None

**Affected Environment and Effects from the Proposed Project:**

<b><u>Key to Rank</u></b>	
NA	<i>Not applicable</i>
N	<i>No effects</i>
B	<i>Potentially beneficial effects</i>
A	<i>Potentially adverse effects</i>
M	<i>Corrective action required</i>
P	<i>Additional permits will be required</i>

Rank	Consideration	Remarks
<b>PHYSICAL AND BIOLOGICAL ENVIRONMENT</b>		
N	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	Based on current data no seismic or geologic conditions will affect the facilities location.
N	2. HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Facility is a wastewater treatment facility. No hazardous materials will be onsite other than Chlorine and Sulfur dioxide for disinfection purposes. These chemicals are under direct control by the operator. The facility operates an anaerobic digester which generates methane gas. The onsite boiler for heating and treatment operations consumes the gas.
N	3. AIR QUALITY (effects to or from project, dust, odors, emissions)	Short-term odors could be possible during infrequent upsets. Land application of Biosolids incorporates the use of subsoil injection and tilling to prevent odors and exposure.
N	4. GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	A groundwater discharge has been identified at the facility through the I/P beds. The Operator will be required to permit this outfall prior to continual use. The permit incorporates a compliance schedule to identify and submit data to be used in the outfall determination.

N	5.	SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	Discharges are regulated by limits established in the permit. All pollutants discharged meet National Secondary Standards, Non-Degradation and Water Quality Effluent Limitations to protect the receiving water quality.
N	6.	VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	Montana Natural Heritage Program, database searches indicate three species of concern within one mile of the facility. Vascular species are ranked as "critically impaired" locally but "demonstrably secure" on a global scale. Last known sitings have been ninety-eight years ago. One aquatic invertebrate is listed as "imperiled because of rarity" on the local level and "apparently secure" globally.
N	7.	UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	The facility is contiguous to the East Gallatin River and its flood plain. No additional impacts to the environment will occur because the facility has long been established at the site. New construction will have to adhere to current regulations and standards.
N	8.	LAND USE (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands), access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)	No changes in land use will occur during the permit cycle.
N	9.	HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	The Bozeman facility has been sited at the current location since prior to 1950.
N	10.	AESTHETICS (visual quality, nuisances, odors, noise)	The Bozeman facility has been sited at the current location since prior to 1950. Urban development has been encroaching on the facility since that time.
N	11.	DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) {See (4), (5), and (8).}	No impacts to environment resources are expected at this time.

Rank	Consideration	Remarks
<b>IMPACTS ON THE HUMAN POPULATION</b>		
NA	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	No impacts are expected.
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	No impacts are expected.
NA	14. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	None
N	15. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	Public health and safety will be improved by treating the communities domestic sewage prior to discharge.

N	16.	LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	No changes to employment or income patterns are expected.
NA	17.	LOCAL AND STATE TAX BASE AND REVENUES	If due to permit conditions, the facility fails to provide the level of treatment to prevent pollutants from being discharged to state waters, the facility may have to raise sewer rates to cover development and construction costs.
NA	18.	EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	No impacts are expected at this time.
NA	19.	TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	Limited impacts will occur to transportation structures during the term of the permit. Ongoing maintenance and replacement of the collection system will cause street closures on a temporary basis.
N	20.	CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	Currently the Permittee is proactive in planning the service needs of the community in the future. The facility has initiated several expansion projects based on future projections.
N	21.	REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS ( <i>Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal? See your assigned legal counsel for assistance preparing this section. [See the Private Property Assessment Act checklist accompanying this permit for details.]</i> )	The limits set within the permit do not impose unnecessary demands on the Permittee at this time. Issuance of the permit will not affect private property.

**Other groups or governmental agencies contacted or which may have overlapping jurisdiction:**

None

**Public Involvement:**

Thirty-day public comment period

**Individuals or groups contributing to this EA:**

State of Montana, DEQ Permitting & Compliance Division

**Summary of Issues:**

See Fact Sheet

**Summary of Potential Effects:**

See Fact Sheet

**Cumulative Effects:**

None

**Recommendation:**

Issue Surface Water Discharge permit

**Recommendation for Further Environmental Analysis:**

☐ Prepare an EIS

☐ Prepare a more detailed EA

☒ No further analysis

EA prepared by: James Lloyd

Date: March 22, 2006

**Bureau Check-off**

AWMB \_\_\_\_\_

CSB \_\_\_\_\_

EMB \_\_\_\_\_

IEMB \_\_\_\_\_

WPB \_\_\_\_\_

Other \_\_\_\_\_

**Approved by:**

Tom Reid, Supervisor  
Water Quality Discharge Permit Section  
Water Protection Bureau

(Print name and title)

\_\_\_\_\_  
(Signature)

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(Date)